PATENT
Attorney Docket No.: SONY-26500

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	)	Group Art Unit: 2194
	)	
Xin Xue et al.	)	Examiner: Nguyen, Van H.
	)	
Serial No.: 10/666,402	)	**APPEAL BRIEF**
	)	
Filed: September 17, 2003	)	162 N. Wolfe Road
	)	Sunnyvale, CA 94086
For: **MIDDLEWARE FILTER AGENT BETWEEN SERVER AND PDA**	)	(408) 530-9700
	)	
	)	Customer No. 28960

Mail Stop Appeal Brief-Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In furtherance of the Applicants' Notice of Appeal filed on November 30, 2009, this Appeal Brief is submitted. This Appeal Brief is submitted in support of the Applicants' Notice of Appeal, and further pursuant to the rejection mailed on September 1, 2009, in which Claims 1, 4-20, 23-34, 37-51, 54-66 and 69-85 were rejected. The Applicants submit this Appeal Brief to the Board of Patent Appeals and Interferences in compliance with the requirements of 37 C.F.R. § 41.37, as stated in *Rules of Practice Before the Board of Patent Appeals and Interferences (Final Rule)*, 69 Fed. Reg. 49959 (August 12, 2004). The Applicants contend that the rejections of Claims 1, 4-20, 23-34, 37-51, 54-66 and 69-85 in this proceeding are in error, were previously overcome and are overcome again by this appeal.

I. REAL PARTIES IN INTEREST

As the assignee of the entire right, title, and interest in the above-captioned patent application, the real parties in interest in this appeal, is:

Sony Corporation, a Japanese corporation
6-7-35 Kitashinagawa, Shinagawa
Tokyo, 141, Japan

Sony Electronics Inc., a corporation of the State of Delaware
1 Sony Drive
Park Ridge, NJ 07656-8003

per the assignment document filed on September 17, 2003.

II. RELATED APPEALS AND INTERFERENCES

The Applicants are not aware of any other appeals or interferences related to the present application.

III. STATUS OF THE CLAIMS

Claims 1, 4-20, 23-34, 37-51, 54-66 and 69-85 are pending in this case. Claims 2, 3, 21, 22, 35, 36, 52, 53, 67 and 68 have been canceled. Claims 1, 4-18, 20, 23-34, 37-51, 54-66 and 69-85 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,341,316 to Kloba et al. (hereinafter "Kloba" a copy of which is attached as Exhibit A). Claim 19 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Kloba. Within this Appeal Brief, the rejections of Claims 1, 4-20, 23-34, 37-51, 54-66 and 69-85 are appealed.

IV. STATUS OF THE AMENDMENTS FILED AFTER FINAL REJECTION

An Amendment and Response was filed by the appellants on October 30, 2009, in response to the Final Office Action mailed on September 1, 2009. This Amendment and Response contained no amendments to the Specification or the Claims and included only a request for reconsideration in view of the included comments. An Advisory Action was received with a mail date of December 1, 2009 thereafter. Therefore, the claims on appeal are as filed on June 1, 2009 in the Amendment and Response to the Office Action mailed March 4, 2009.

V. SUMMARY OF CLAIMED SUBJECT MATTER

The invention disclosed in the present application number 10/666,402 is directed to a content server that provides content to a first network device during a data synchronization between the two devices. A middleware filter selectively filters content provided by the content server such that selected content is provided to the first network device. The middleware filter is included within a second network device coupled between the content server and the first network device. The second network device acts as a proxy for the first network device to receive the content provided by the content server.

The elements of Claim 1, directed to one embodiment of the presently claimed invention, are described in the Specification at least at page 6, line 10 to page 7, line 15 and page 9, line 18 to page 10, line 19, and the accompanying Figures 1 and 4. The network described there comprises a content server 10 to store content, a first network device 20 and a middleware filter 34 coupled to the first network device 20 and to the content server 10 such that during a data synchronization, content is received by the middleware filter 34 from the content server 10 according to the data synchronization and the middleware filter 34 is programmed to selectively filter 34 the content resulting in filtered content and send only the filtered content to the first network device 20, wherein the middleware filter 34 selectively filters in response meta data within the content, wherein the meta data comprises a data type of the content.

The elements of Claim 20, directed to one embodiment of the presently claimed invention, are described in the Specification at least at page 7, line 16 to page 9, line 9, and the accompanying Figures 2 and 4. The network described there comprises a content server 10 to store content, a personal digital assistant and a personal computer coupled to the personal digital assistant and to the content server 10, wherein the personal computer includes a middleware filter 34 programmed such that during a data synchronization, content received by the personal computer from the content server 10 according to the data synchronization is selectively filtered according to the middleware filter 34, resulting in filtered content, wherein only the filtered content is sent to the personal digital assistant by the personal computer, wherein the middleware filter 34 selectively filters in response meta data within the content, wherein the meta data comprises a data type of the content.

The elements of Claim 34, directed to one embodiment of the presently claimed invention, are described in the Specification at least at page 6, line 10 to page 9, line 17, and the accompanying Figures 1-3. The method described there comprises determining content to be sent from a content server 10 to a first network device 20 during a data synchronization, sending the content from the content server 10 to a second network device 30 coupled between the content server 10 and the first network device 20, wherein the second network device 30 includes a middleware filter 34, selectively filtering the content according to the middleware filter 34 in response to meta data contained within the content, wherein the meta data comprises a data type of the content and sending the filtered content from the second network device 30 to the first network device 20.

The elements of Claim 51, directed to one embodiment of the presently claimed invention, are described in the Specification at least at page 6, line 10 to page 9, line 9 and page 11, lines 1-7, and the accompanying Figures 1, 2 and 6. The method described there comprises determining content to be sent from a content server 10 to a first network device 20 during a data synchronization, wherein the content server 10 includes a middleware filter 34, selectively filtering the determined content according to the middleware filter 34 in response to meta data

contained within the content, wherein the meta data comprises a data type of the content and sending the filtered content from the content server 10 to the first network device 20.

The elements of Claim 66, directed to one embodiment of the presently claimed invention, are described in the Specification at least page 6, line 10 to page 7, line 15 and page 9, line 18 to page 10, line 19, and the accompanying Figures 1 and 4. The apparatus described there includes a middleware filter 34 programmed such that during a data synchronization, content is received by the apparatus from a content server 10 according to the data synchronization, and the received content is selectively sent to a network device by the apparatus according to the middleware filter 34, wherein the received content is selectively sent in response to meta data within the selected content, wherein the meta data comprises a data type of the content.

The elements of Claim 83, directed to one embodiment of the presently claimed invention, are described in the Specification at least at page 8, line 19 to page 9, line 3 and 9, line 18 to page 10, line 19, and the accompanying Figures 2–4. The apparatus described there comprises means for determining content to be sent from a content server 10 to a first network device 20 during a data synchronization, means for sending the content from the content server 10 to a second network device 30 coupled between the content server 10 and the first network device 20, wherein the second network device 30 includes a middleware filter 34, means for selectively filtering the content in response to meta data contained within the content, wherein the meta data comprises a data type of the content and means for sending the filtered content from the second network device 30 to the first network device 20.

Means for determining content to be sent from a content server 10 to a first network device 20 during a data synchronization is shown in Figures 2 and 4. Data synchronization is preferably established between the PDA 22 and the content server 10. Content to be synchronized is determined, and the determined content is sent from the content server 10 to the PC 32. [Present Specification, page 8, lines 19-21]

Means for sending the content from the content server 10 to a second network device 30 coupled between the content server 10 and the first network device 20 is shown in Figures 1, 2

and 4. In the preferred embodiment, the middleware filter 34 resides on a proxy network device, where the proxy network device acts as a proxy for an end-user network device. The content is provided by the content server 10 to the proxy network device, where the middleware filter 34 selectively filters the content ultimately destined for the end-user network device. In Figure 2, a personal computer (PC) 32 performs as the proxy network device, and a personal digital assistant (PDA) 22 performs as the end-user network device. A middleware filter 34 resides within the PC 32. Content from the content server 10 is preferably sent over network connection 25 during a data synchronization process. [Present Specification, page 7, lines 19-27] Data synchronization is preferably established between the PDA 22 and the content server 10. Content to be synchronized is determined, and the determined content is sent from the content server 10 to the PC 32. [Present Specification, page 8, lines 19-21]

Means for selectively filtering the content in response to meta data contained within the content is shown in Figures 1, 2, and 4. The middleware filter 34 within the PC 32 receives the content and reads the meta data. The middleware filter 34 also includes device-specific information related to the PDA 22. Using the read meta data from the received content, and the PDA 22 information, the middleware filter 34 applies rules to determine if the content is to be sent from the PC 32 to the PDA 22. An exemplary rule compares the data type of the content to the data types that the PDA is capable of running, or is authorized to run. If the PDA 22 is capable, or authorized, to run the data type of the content then the content is sent from the PC 32 to the PDA 22. If the data type is not capable, or not authorized, to run on the PDA 22 then the content is not sent to the PDA 22. Another exemplary rule compares a device type of the PDA 22 with the device types the content is capable, or authorized to run on, as indicated in the meta data of the content. If there is a match, the content is sent to the PDA 22. If there is not a match, then the content is not sent to the PDA 22. In this manner, the content received by the PC 32 is selectively filtered by the middleware filter 34, such that only select content received by the PC 32 is sent to the PDA 22. [Present Specification, page 8, line 21 to page 9, line 3]

Means for sending the filtered content from the second network device 30 to the first network device 20 is shown in Figures 1, 2, and 4. The middleware filter 34 within the PC 32 receives the content and reads the meta data. The middleware filter 34 also includes device-specific information related to the PDA 22. Using the read meta data from the received content, and the PDA 22 information, the middleware filter 34 applies rules to determine if the content is to be sent from the PC 32 to the PDA 22. An exemplary rule compares the data type of the content to the data types that the PDA is capable of running, or is authorized to run. If the PDA 22 is capable, or authorized, to run the data type of the content then the content is sent from the PC 32 to the PDA 22. If the data type is not capable, or not authorized, to run on the PDA 22 then the content is not sent to the PDA 22. Another exemplary rule compares a device type of the PDA 22 with the device types the content is capable, or authorized to run on, as indicated in the meta data of the content. If there is a match, the content is sent to the PDA 22. If there is not a match, then the content is not sent to the PDA 22. In this manner, the content received by the PC 32 is selectively filtered by the middleware filter 34, such that only select content received by the PC 32 is sent to the PDA 22. [Present Specification, page 8, line 21 to page 9, line 3]

The elements of Claim 84, directed to one embodiment of the presently claimed invention, are described in the Specification at least at page 6, line 10 to page 7, line 15 and page 9, line 18 to page 10, line 19, and the accompanying Figures 1 and 4. The network described there comprises a content server 10 to store content, a first network device 20, wherein a communications channel is established for communicating content from the content server 10 to the first network device 20 and a middleware filter 34 coupled to the first network device 20 and to the content server 10 such that during a data synchronization, all content sent over the communications channel from the content server 10 is received by the middleware filter 34 according to the data synchronization, and the middleware filter 34 is programmed to selectively filter 34 the content in response to meta data within the content resulting in filtered content and send only the filtered content to the first network device 20, wherein the meta data comprises a data type of the content.

The elements of Claim 85, directed to one embodiment of the presently claimed invention, are described in the Specification at least at page 6, line 10 to page 7, line 15 and page 9, line 18 to page 10, line 19, and the accompanying Figures 1 and 4. The network described there comprises a content server 10 to store content, a first network device 20 and a second network device 30 coupled between the first network device 20 and the content server 10, the second network device 30 comprising a middleware filter 34, such that during a data synchronization, content is received by the middleware filter 34 from the content server 10 according to the data synchronization and the middleware filter 34 is programmed to selectively filter 34 the content in response to meta data within the content resulting in filtered content and send only the filtered content to the first network device 20, wherein the meta data comprises a data type of the content, and further wherein the first network device 20 and the second network device 30 are local and the content server 10 is remote from the first network device 20 and the second network device.

VI. GROUNDS OF REJECTION AND OTHER MATTERS TO BE REVIEWED ON APPEAL

The following issues are presented in this Appeal Brief for review by the Board of Patent Appeals and Interferences:

1. Whether Claims 1, 4-18, 20, 23-34, 37-51, 54-66 and 69-85 are properly rejected under 35 U.S.C. § 102(b) as being anticipated by Kloba.
2. Whether Claim 19 is properly rejected under 35 U.S.C. § 103(a) as being unpatentable over Kloba.

VII. ARGUMENT

Grounds for Rejection

Within the Office Action, Claims 1, 4-18, 20, 23-34, 37-51, 54-66 and 69-85 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Kloba.

Outline of Arguments

In the discussion that follows, the Applicants discuss the teachings of Kloba. As will be discussed in detail below, Kloba does not teach a middleware filter that filters the content in response to meta data within the content. Further, Kloba does not teach that content is filtered by a middleware filter based on a compatibility of a first network device and the content. Moreover, Kloba does not teach that a content server first filters a content to determine the data that needs to be synchronized (e.g. what has changed), then a middleware filter filters the synchronization content a second time in response to meta data within the content. Even further, Kloba does not teach a middleware filter that filters the content and sends only filtered content to a device.

Kloba teaches a system, method, and computer program product for synchronizing content between a server and a client based on state information. [Kloba, Abstract] Kloba teaches systems for enabling web content to be loaded on mobile devices, and for users of devices to operate with such web content on their mobile devices in an interactive manner while in an off-line mode. [Kloba, Abstract] Kloba teaches that the mobile device is placed into an adapter to synchronize a mobile client with a server. [Kloba, col. 5, lines 41-52]

In contrast to the teachings of Kloba, the middleware filter agent of the presently claimed invention, selectively filters the content provided by the content server *in response to meta data contained within the content* such that only selected content is provided to a first network device. A content server provides content to the first network device during a data synchronization between the two devices. The middleware filter selectively filters the content provided by the content server such that selected content is provided to the first network device. The middleware filter is preferably included within a second network device coupled between the content server

and the first network device. In this manner, the second network device acts as a proxy for the first network device to receive the content provided by the content server. In an alternative embodiment, the content server is coupled to the first network device, without the second network device coupled in between. The middleware filter is included within the content server, and the content is selectively provided from the middleware filter, on the content server, to the first network device.

1. Kloba does not teach a middleware filter that filters the content in response to meta data within the content.

Kloba teaches a system, method, and computer program product for synchronizing content between a server and a client based on state information. Kloba teaches systems for enabling web content to be loaded on mobile devices, and for users of devices to operate with such web content on their mobile devices in an interactive manner while in an off-line mode. [Kloba, Abstract] Kloba teaches that the mobile device is placed into an adapter to synchronize a mobile client with a server. [Kloba, col. 5, lines 41-52] However, Kloba does not teach a middleware filter that filters the content in response to meta data within the content. Kloba instead teaches that selected content is modified/optimized based on meta tags.

Within the Office Action of September 1, 2009, it is asserted that "Kloba teaches content is filtered based on meta data contained within the content and the middleware filter selectively filters meta data comprising a data type of the content" by "[Table 3; col. 6, lines 1-38; col. 15, lines 15-34]." [Office Action of September 1, 2009, page 8] However, the cited portion of Kloba does not teach that the content is filtered in response to meta data within the content, it only teaches that the content is modified or optimized based on the meta data. [Kloba, col. 5, line 63 to col. 6, line 36] Modification/optimization is not the same as filtering. The modification/optimization of Kloba is not the process that determines what is sent to the client, it only ensures that the content is in an optimal format for the client. [Kloba, col. 5, line 63 to col. 6, line 36] Thus, only after this optimization has been performed does Kloba then determine

what content will be sent to the client based on what the client already has. [Kloba, col. 14, lines 50-53] Indeed, because the filtering of Kloba is not based on the meta tags, it is possible for content to contain a meta tag that allows for optimization (e.g. META NAME= "Handheld-Friendly" content= "True") and therefore be optimized based on the meta tag, but then not sent to the client because the client already contains the content. Similarly, the content could contain a meta tag that does not allow for optimization, yet the content is not already on the client and as a result the content will still be sent to the client. Thus, the meta tags will have no effect on the filtering process. Accordingly, although Kloba uses meta tags to determine what content is optimizable/modifiable, it does not base its "filtering" on the meta tags in any way. Specifically, this modification, not filtration, based on meta tags is discussed in Kloba as follows:

> [w]hen Web content and other network objects pass through the server they are processed to minimize their size and to *optimize* their delivery to mobile devices ... On the server, the [content] is *optimized* per state information of the device ... the server sends its best version of [the content] *optimized* for that environment. The technology of the invention is extended by tags on HTML pages that identify content that is designed for *additional modifications* ... The server detects the tag and executes the necessary logic. [Kloba, col. 5 line 63 to col. 6 line 36, emphasis added].

Thus, it is apparent that Kloba utilizes the meta tags to streamline the optimization process, not to help with the filtration process. As a result, Kloba does not teach a middleware filter that filters the content in response to meta data within the content.

2. Kloba does not teach that content is filtered by a middleware filter based on a compatibility of a first network device and the content.

Kloba does not teach that content is filtered by a middleware filter based on a compatibility of a first network device and the content. Instead, as described above, Kloba filters based on whether the content is already present on the client, not based on whether it is compatible with the client or the client is compatible with it. Indeed, within the Office Action it

is recognized that the server of Kloba "receives multiple objects and [sends] only objects that have changed [and are therefore not already present on the client] to the client." [Office Action of September 1, 2009, page 8] Accordingly, Kloba does not teach that content is filtered by a middleware filter based on a compatibility of a first network device and the content.

3. Kloba does not teach that a content server first filters a content to determine the data that needs to be synchronized (e.g. what has changed), then a middleware filter filters the synchronization content a second time in response to meta data within the content.

Kloba does not teach that a content server first filters a content to determine the data that needs to be synchronized (e.g. what has changed), then a middleware filter filters the synchronization content a second time in response to meta data within the content. Instead, as described above, Kloba only teaches that the content is filtered once based on whether it is already present on the client, not twice by a server and then a middleware filter. Indeed, the whole purpose of Kloba is synchronization, thus the only filtration needed is to determine if the content is already on the client. In general, Kloba teaches a conventional data synchronization process where only data that is new or changed from the data already stored on a client is transmitted, thereby "synching" the client data to the source data. In this sense, the process of Kloba performs a single filtering process. In contrast, the presently claimed network and method implement a double filtering process. First is the conventional data synchronization step where the content server determines updated or new content to be sent to the client. Second is the further filtering of that determined content data, where this further filtering is performed by the middleware filter. This further filtering is performed on the actual data sent as part of the first filtering step (data synchronization). The actual data is physically received at the middleware filter, where it is selectively filtered to form filtered content. Accordingly, Kloba does not teach that a content server first filters a content to determine the data that needs to be synchronized (e.g. what has changed), then a middleware filter filters the synchronization content a second time in response to meta data within the content.

4. Kloba does not teach a middleware filter that filters the content and sends only filtered content to a device.

Kloba does not teach a middleware filter that filters the content and sends only filtered content to a device. Instead, only pre-filtered content received by the server 104 and thus no further filtering is needed or performed by the server 104. The server 104 only acts to optimize the content and forward it to the appropriate client device. Within the Office Action of March 4, 2009, it is asserted that the server 104 and providers 128 of Kloba correspond to the claimed middleware filter and content server, respectively. The claimed limitations are directed to a content server that stores content and to a middleware filter that receives content from the content server and selectively filters that received content in response to metadata within the content, thereby resulting in filtered content. The filtered content is then sent from the middleware filter to the first network device. Within the response to arguments section of the Office Action of March 4, 2009, col. 14, lines 46-50 of Kloba is cited and it is concluded that this section of Kloba teaches "filtering content and sending only the filtered content by sending changed objects." However, all this cited portion of Kloba states is that the server 104 identifies changed objects and then forwards those objects to the client. It does not teach, as required by the claimed limitations, that the server first receives all of the content (e.g. before it has been filtered) and then filters the content based on what objects have been changed. There is simply no indication that all objects associated with a given channel are sent to the server 104, and that the server 104 then filters those objects in response to meta data within the objects to form a set of only changed objects as claimed in the presently claimed invention.

Similarly, column 14, line 64 to column 15, line 2 of Kloba, which is also cited in the Office Action of March 4, 2009, does not teach that the server 104 receives all of the content and filters it such that only filtered content is sent to the clients. Specifically, within the Office Action of March 4, 2009 it is concluded that Kloba teaches "the server 104, which corresponds to the claimed middleware filter, receiving multiple objects and sending only objects that have

changed to the client 108, which corresponds to the claimed first network device." However, as with the previous citation, there is no indication that all objects associated with a given channel are sent to the server 104, and that the server 104 then filters those objects to form a set of only changed objects. The above citations merely indicate that the server 104 "identifies" any changed objects, and that the server 104 sends those identified objects to the client 108. This begs the question, is the selective filtering of the changed objects from the set of all objects for a given channel occurring at the server 104 or at the providers 128, and on what information is the selective filtering based? The answer is that Kloba teaches that the server 104 functions merely as a pass-through device, functioning as an interface to the data provided by the providers 128. It is taught at col. 7, line 66 to col. 8, line 5 of Kloba that:

> [d]uring a synchronization process, the server 104 loads a device 108 with the channels associated with the client 108. Generally, *the server 104 does this by obtaining from providers 128 the objects defined by the channels, and causing those objects to be stored on the client 108*. Thus, during the synchronization process, the server 104 will load the client 108 with the selected channels. More particularly, the server 104 will load the client 108 with the objects associated with the channels. [Kloba, col. 7, line 66 - col. 8, line 5, Emphasis added]

Again, there is no indication that all objects for a given channel are loaded onto the server 104, and that the server 104 then selectively filters the objects based on meta data within the content to form filtered content (changed objects). The implication is that the server 104 determines what filtered content (changed objects) are to be sent from the providers 128 to the client 108 (via the server 104), but the actual objects (claimed content to be filtered) for the entire channel are not sent to the server 104. Mere "identification" is not the same as filtration. Thus, Kloba does not teach a middleware filter that filters the content and sends only filtered content to a device.

5. The claims distinguish over Kloba.

The claims are grouped separately below to indicate that they do not stand or fall together.

a. Claim 1

The independent Claim 1 is directed to a network of devices to filter synchronized data. The network of devices of Claim 1 comprises a content server to store content, a first network device and a middleware filter coupled to the first network device and to the content server such that during a data synchronization, content is received by the middleware filter from the content server according to the data synchronization and the middleware filter is programmed to selectively filter the content resulting in filtered content and send only the filtered content to the first network device, wherein the middleware filter selectively filters in response meta data within the content, wherein the meta data comprises a data type of the content. As described above, Kloba does not teach a middleware filter that filters the content in response to meta data within the content. Further, Kloba does not teach that content is filtered by a middleware filter based on a compatibility of a first network device and the content. Moreover, Kloba does not teach that a content server first filters a content to determine the data that needs to be synchronized (e.g. what has changed), then a middleware filter filters the synchronization content a second time based on meta data. Even further, Kloba does not teach a middleware filter that filters the content and sends only filtered content to a device. For at least these reasons, the independent Claim 1 is allowable over the teachings of Kloba.

b. Claims 4-18

Claims 4-18 are all dependent on the independent Claim 1. As described above, the independent Claim 1 is allowable over the teachings of Kloba. Accordingly, Claims 4-18 are all also allowable as being dependent on an allowable base claim.

c. Claim 20

The independent Claim 20 is directed to a network of devices to filter synchronized data. The network of devices of Claim 20 comprises a content server to store content, a personal digital assistant and a personal computer coupled to the personal digital assistant and to the content server, wherein the personal computer includes a middleware filter programmed such that during a data synchronization, content received by the personal computer from the content server according to the data synchronization is selectively filtered according to the middleware filter, resulting in filtered content, wherein only the filtered content is sent to the personal digital assistant by the personal computer, wherein the middleware filter selectively filters in response meta data within the content, wherein the meta data comprises a data type of the content. As described above, Kloba does not teach a middleware filter that filters the content in response to meta data within the content. Further, Kloba does not teach that content is filtered by a middleware filter based on a compatibility of a first network device and the content. Moreover, Kloba does not teach that a content server first filters a content to determine the data that needs to be synchronized (e.g. what has changed), then a middleware filter filters the synchronization content a second time based on meta data. Even further, Kloba does not teach a middleware filter that filters the content and sends only filtered content to a device. For at least these reasons, the independent Claim 20 is allowable over the teachings of Kloba.

d. Claims 23-33

Claims 23-33 are all dependent on the independent Claim 20. As described above, the independent Claim 20 is allowable over the teachings of Kloba. Accordingly, Claims 23-33 are all also allowable as being dependent on an allowable base claim.

e. Claim 34

The independent Claim 34 is directed to a method of filtering synchronized data. The method of Claim 34 comprises determining content to be sent from a content server to a first network device during a data synchronization, sending the content from the content server to a second network device coupled between the content server and the first network device, wherein the second network device includes a middleware filter, selectively filtering the content according to the middleware filter in response to meta data contained within the content, wherein the meta data comprises a data type of the content and sending the filtered content from the second network device to the first network device. As described above, Kloba does not teach a middleware filter that filters the content in response to meta data within the content. Further, Kloba does not teach that content is filtered by a middleware filter based on a compatibility of a first network device and the content. Moreover, Kloba does not teach that a content server first filters a content to determine the data that needs to be synchronized (e.g. what has changed), then a middleware filter filters the synchronization content a second time based on meta data. Even further, Kloba does not teach a middleware filter that filters the content and sends only filtered content to a device. For at least these reasons, the independent Claim 34 is allowable over the teachings of Kloba.

f. Claims 37-50

Claims 37-50 are all dependent on the independent Claim 34. As described above, the independent Claim 34 is allowable over the teachings of Kloba. Accordingly, Claims 37-50 are all also allowable as being dependent on an allowable base claim.

g. Claim 51

The independent Claim 51 is directed to a method of filtering synchronized data. The method of Claim 51 comprises determining content to be sent from a content server to a first network device during a data synchronization, wherein the content server includes a middleware filter, selectively filtering the determined content according to the middleware filter in response to meta data contained within the content, wherein the meta data comprises a data type of the content and sending the filtered content from the content server to the first network device. As described above, Kloba does not teach a middleware filter that filters the content in response to meta data within the content. Further, Kloba does not teach that content is filtered by a middleware filter based on a compatibility of a first network device and the content. Moreover, Kloba does not teach that a content server first filters a content to determine the data that needs to be synchronized (e.g. what has changed), then a middleware filter filters the synchronization content a second time based on meta data. Even further, Kloba does not teach a middleware filter that filters the content and sends only filtered content to a device. For at least these reasons, the independent Claim 51 is allowable over the teachings of Kloba.

h. Claims 54-65

Claims 54-65 are all dependent on the independent Claim 51. As described above, the independent Claim 51 is allowable over the teachings of Kloba. Accordingly, Claims 54-65 are all also allowable as being dependent on an allowable base claim.

i. Claim 66

The independent Claim 66 is directed to an apparatus to filter synchronized data wherein the apparatus includes a middleware filter programmed such that during a data synchronization, content is received by the apparatus from a content server according to the data synchronization, and the received content is selectively sent to a network device by the apparatus according to the middleware filter, wherein the received content is selectively sent in response to meta data within the selected content, wherein the meta data comprises a data type of the content. As described above, Kloba does not teach a middleware filter that filters the content in response to meta data within the content. Further, Kloba does not teach that content is filtered by a middleware filter based on a compatibility of a first network device and the content. Moreover, Kloba does not teach that a content server first filters a content to determine the data that needs to be synchronized (e.g. what has changed), then a middleware filter filters the synchronization content a second time based on meta data. Even further, Kloba does not teach a middleware filter that filters the content and sends only filtered content to a device. For at least these reasons, the independent Claim 66 is allowable over the teachings of Kloba.

j. Claims 69-82

Claims 69-82 are all dependent on the independent Claim 66. As described above, the independent Claim 66 is allowable over the teachings of Kloba. Accordingly, Claims 69-82 are all also allowable as being dependent on an allowable base claim.

k. Claim 83

The independent Claim 83 is directed to an apparatus for filtering synchronized data. The apparatus of Claim 83 comprises means for determining content to be sent from a content server to a first network device during a data synchronization, means for sending the content from the content server to a second network device coupled between the content server and the first network device, wherein the second network device includes a middleware filter, means for selectively filtering the content in response to meta data contained within the content, wherein the meta data comprises a data type of the content and means for sending the filtered content from the second network device to the first network device. As described above, Kloba does not teach a middleware filter that filters the content in response to meta data within the content. Further, Kloba does not teach that content is filtered by a middleware filter based on a compatibility of a first network device and the content. Moreover, Kloba does not teach that a content server first filters a content to determine the data that needs to be synchronized (e.g. what has changed), then a middleware filter filters the synchronization content a second time based on meta data. Even further, Kloba does not teach a middleware filter that filters the content and sends only filtered content to a device. For at least these reasons, the independent Claim 83 is allowable over the teachings of Kloba.

l. Claim 84

The independent Claim 84 is directed to a network of devices to filter synchronized data. The network of devices of Claim 84 comprises a content server to store content, a first network device, wherein a communications channel is established for communicating content from the content server to the first network device and a middleware filter coupled to the first network device and to the content server such that during a data synchronization, all content sent over the communications channel from the content server is received by the middleware filter according to the data synchronization and the middleware filter is programmed to selectively filter the content in response to meta data within the content resulting in filtered content and send only the filtered content to the first network device, wherein the meta data comprises a data type of the content. As described above, Kloba does not teach a middleware filter that filters the content in response to meta data within the content. Further, Kloba does not teach that content is filtered by a middleware filter based on a compatibility of a first network device and the content. Moreover, Kloba does not teach that a content server first filters a content to determine the data that needs to be synchronized (e.g. what has changed), then a middleware filter filters the synchronization content a second time based on meta data. Even further, Kloba does not teach a middleware filter that filters the content and sends only filtered content to a device. For at least these reasons, the independent Claim 84 is allowable over the teachings of Kloba.

m. Claim 85

The independent Claim 85 is directed to a network of devices to filter synchronized data. The network of devices of Claim 85 comprises a content server to store content, a first network device and a second network device coupled between the first network device and the content server, the second network device comprising a middleware filter, such that during a data synchronization, content is received by the middleware filter from the content server according to

the data synchronization and the middleware filter is programmed to selectively filter the content in response to meta data within the content resulting in filtered content and send only the filtered content to the first network device, wherein the meta data comprises a data type of the content, and further wherein the first network device and the second network device are local and the content server is remote from the first network device and the second network device. As described above, Kloba does not teach a middleware filter that filters the content in response to meta data within the content. Further, Kloba does not teach that content is filtered by a middleware filter based on a compatibility of a first network device and the content. Moreover, Kloba does not teach that a content server first filters a content to determine the data that needs to be synchronized (e.g. what has changed), then a middleware filter filters the synchronization content a second time based on meta data. Even further, Kloba does not teach a middleware filter that filters the content and sends only filtered content to a device. For at least these reasons, the independent Claim 85 is allowable over the teachings of Kloba.

Grounds for Rejection

Within the Office Action, Claim 19 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Kloba.

Arguments

Claim 19 is dependent on the independent Claim 1. As discussed above, the independent Claim 1 is allowable over the teachings of Kloba. Accordingly, Claim 19 is also allowable as being dependent on an allowable base claim.

6. CONCLUSION

For the above reasons, it is respectfully submitted that the Claims 1, 4-20, 23-34, 37-51, 54-66 and 69-85 are allowable over the cited prior art references. Therefore, a favorable indication is respectfully requested.

Respectfully submitted,
HAVERSTOCK & OWENS LLP

Dated: January 15, 2010

By: /Jonathan O. Owens/
Jonathan O. Owens
Reg. No.: 37,902
Attorneys for Applicants

VIII. CLAIMS APPENDIX

This appendix includes a list of the claims under appeal.

1. A network of devices to filter synchronized data, the network of devices comprising:
   a. a content server to store content;
   b. a first network device; and
   c. a middleware filter coupled to the first network device and to the content server such that during a data synchronization, content is received by the middleware filter from the content server according to the data synchronization and the middleware filter is programmed to selectively filter the content resulting in filtered content and send only the filtered content to the first network device, wherein the middleware filter selectively filters in response meta data within the content, wherein the meta data comprises a data type of the content.

2. (canceled)

3. (canceled)

4. The network of devices of claim 1 wherein the middleware filter reads the meta data of the content received from the content server and sends the content to the first network device if the data type of the read meta data matches an authorized data type associated with the first network device.

5. The network of devices of claim 4 wherein the middleware filter stores the authorized data type of the first network device.

6. The network of devices of claim 1 wherein the meta data includes an authorized network device type.

7. The network of devices of claim 6 wherein the middleware filter reads the meta data of the content received from the content server and sends the content to the first network device if the authorized network device type of the read meta data matches a network device type associated with the first network device.

8. The network of devices of claim 7 wherein the middleware filter stores the network device type of the first network device.

9. The network of devices of claim 1 wherein the meta data is added to the content by the content server.

10. The network of devices of claim 1 wherein the meta data includes data synchronization information corresponding to the data synchronization.

11. The network of devices of claim 10 further comprising a display coupled to the middleware filter to display the data synchronization information.

12. The network of devices of claim 1 wherein the data synchronization is a one-way data synchronization.

13. The network of devices of claim 1 wherein the data synchronization is a bi-directional data synchronization.

14. The network of devices of claim 1 wherein the middleware filter is within a second network device and further wherein the second network device comprises a personal computer.

15. The network of devices of claim 1 wherein the first network device comprises a personal digital assistant.

16. The network of devices of claim 1 wherein the content server comprises a web server.

17. The network of devices of claim 1 wherein the middleware filter is within a second network device and further wherein the second network device comprises a server.

18. The network of devices of claim 1 further comprising a second network device coupled in between the content server and the first network device, wherein the second network device includes the middleware filter.

19. The network of devices of claim 1 wherein the content server includes the middleware filter.

20. A network of devices to filter synchronized data, the network of devices comprising:
    a. a content server to store content;
    b. a personal digital assistant; and
    c. a personal computer coupled to the personal digital assistant and to the content server, wherein the personal computer includes a middleware filter programmed such that during a data synchronization, content received by the personal computer from the content server according to the data synchronization is selectively filtered according to the middleware filter, resulting in filtered content,

wherein only the filtered content is sent to the personal digital assistant by the personal computer, wherein the middleware filter selectively filters in response meta data within the content, wherein the meta data comprises a data type of the content.

21. (canceled)

22. (canceled)

23. The network of devices of claim 20 wherein the personal computer reads the meta data of the content received from the content server and sends the content to the personal digital assistant if the data type of the read meta data matches an authorized data type associated with the personal digital assistant.

24. The network of devices of claim 23 wherein the personal computer stores the authorized data type of the personal digital assistant.

25. The network of devices of claim 20 wherein the meta data includes an authorized network device type.

26. The network of devices of claim 25 wherein the personal computer reads the meta data of the content received from the content server and sends the content to the personal digital assistant if the authorized network device type of the read meta data matches a network device type associated with the personal digital assistant.

27. The network of devices of claim 26 wherein the personal computer stores the network device type of the personal digital assistant.

28. The network of devices of claim 20 wherein the meta data is added to the content by the content server.

29. The network of devices of claim 20 wherein the meta data includes data synchronization information corresponding to the data synchronization.

30. The network of devices of claim 29 wherein the personal computer displays the data synchronization information.

31. The network of devices of claim 20 wherein the data synchronization is a one-way data synchronization.

32. The network of devices of claim 20 wherein the data synchronization is a bi-directional data synchronization.

33. The network of devices of claim 20 wherein the content server comprises a web server.

34. A method of filtering synchronized data, the method comprising:
    a. determining content to be sent from a content server to a first network device during a data synchronization;
    b. sending the content from the content server to a second network device coupled between the content server and the first network device, wherein the second network device includes a middleware filter;
    c. selectively filtering the content according to the middleware filter in response to meta data contained within the content, wherein the meta data comprises a data type of the content; and

d. sending the filtered content from the second network device to the first network device.

35. (canceled)

36. (canceled)

37. The method of claim 34 wherein selectively filtering the content includes reading the meta data of the content received from the content server by the middleware filter, matching the data type of the read meta data to an authorized data type associated with the first network device, and sending the content to the first network device if the data type of the read meta data matches the authorized data type associated with the first network device.

38. The method of claim 37 wherein the middleware filter stores the authorized data type of the first network device.

39. The method of claim 34 wherein the meta data includes an authorized network device type.

40. The method of claim 39 wherein selectively filtering the content includes reading the meta data of the content received from the content server by the middleware filter, matching the authorized network device type of the read meta data to a network device type associated with the first network device, and sending the content to the first network device if the authorized network device type of the read meta data matches the network device type associated with the first network device.

41. The method of claim 40 wherein the middleware filter stores the network device type of the first network device.

42. The method of claim 34 wherein the meta data is added to the content by the content server.

43. The method of claim 34 wherein the meta data includes data synchronization information corresponding to the data synchronization.

44. The method of claim 43 further comprising displaying the data synchronization information.

45. The method of claim 34 wherein the data synchronization is a one-way data synchronization.

46. The method of claim 47 wherein the data synchronization is a bi-directional data synchronization.

47. The method of claim 34 wherein the second network device comprises a personal computer.

48. The method of claim 34 wherein the first network device comprises a personal digital assistant.

49. The method of claim 34 wherein the content server comprises a web server.

50. The method of claim 34 wherein the second network device comprises a server.

51. A method of filtering synchronized data, the method comprising:
    a. determining content to be sent from a content server to a first network device during a data synchronization, wherein the content server includes a middleware filter;
    b. selectively filtering the determined content according to the middleware filter in response to meta data contained within the content, wherein the meta data comprises a data type of the content; and
    c. sending the filtered content from the content server to the first network device.

52. (canceled)

53. (canceled)

54. The method of claim 51 wherein selectively filtering the determined content includes reading the meta data of the determined content by the middleware filter, matching the data type of the read meta data to an authorized data type associated with the first network device, and sending the determined content to the first network device if the data type of the read meta data matches the authorized data type associated with the first network device.

55. The method of claim 54 wherein the middleware filter stores the authorized data type of the first network device.

56. The method of claim 51 wherein the meta data includes an authorized network device type.

57. The method of claim 56 wherein selectively filtering the determined content includes reading the meta data of the determined content by the middleware filter, matching the authorized network device type of the read meta data to a network device type associated with the first network device, and sending the determined content to the first network device if the authorized network device type of the read meta data matches the network device type associated with the first network device.

58. The method of claim 57 wherein the middleware filter stores the network device type of the first network device.

59. The method of claim 51 wherein the meta data is added to the content by the content server.

60. The method of claim 51 wherein the meta data includes data synchronization information corresponding to the data synchronization.

61. The method of claim 60 further comprising displaying the data synchronization information.

62. The method of claim 51 wherein the data synchronization is a one-way data synchronization.

63. The method of claim 51 wherein the data synchronization is a bi-directional data synchronization.

64. The method of claim 51 wherein the first network device comprises a personal digital assistant.

65. The method of claim 51 wherein the content server comprises a web server.

66. An apparatus to filter synchronized data wherein the apparatus includes a middleware filter programmed such that during a data synchronization, content is received by the apparatus from a content server according to the data synchronization, and the received content is selectively sent to a network device by the apparatus according to the middleware filter, wherein the received content is selectively sent in response to meta data within the selected content, wherein the meta data comprises a data type of the content.

67. (canceled)

68. (canceled)

69. The apparatus of claim 66 wherein the middleware filter reads the meta data of the content received from the content server and sends the content to the network device if the data type of the read meta data matches an authorized data type associated with the network device.

70. The apparatus of claim 69 wherein the middleware filter stores the authorized data type of the network device.

71. The apparatus of claim 66 wherein the meta data includes an authorized network device type.

72. The apparatus of claim 71 wherein the middleware filter reads the meta data of the content received from the content server and sends the content to the network device if

the authorized network device type of the read meta data matches a network device type associated with the network device.

73. The apparatus of claim 72 wherein the middleware filter stores the network device type of the network device.

74. The apparatus of claim 66 wherein the meta data is added to the content by the content server.

75. The apparatus of claim 66 wherein the meta data includes data synchronization information corresponding to the data synchronization.

76. The apparatus of claim 75 further comprising a display to display the data synchronization information.

77. The apparatus of claim 66 wherein the data synchronization is a one-way data synchronization.

78. The apparatus of claim 66 wherein the data synchronization is a bi-directional data synchronization.

79. The apparatus of claim 66 wherein the apparatus comprises a personal computer.

80. The apparatus of claim 66 wherein the network device comprises a personal digital assistant.

81. The apparatus of claim 66 wherein the content server comprises a web server.

82. The apparatus of claim 66 wherein the apparatus comprises a server.

83. An apparatus for filtering synchronized data comprising:

a. means for determining content to be sent from a content server to a first network device during a data synchronization;

b. means for sending the content from the content server to a second network device coupled between the content server and the first network device, wherein the second network device includes a middleware filter;

c. means for selectively filtering the content in response to meta data contained within the content, wherein the meta data comprises a data type of the content; and

d. means for sending the filtered content from the second network device to the first network device.

84. A network of devices to filter synchronized data, the network of devices comprising:

a. a content server to store content;

b. a first network device, wherein a communications channel is established for communicating content from the content server to the first network device; and

c. a middleware filter coupled to the first network device and to the content server such that during a data synchronization, all content sent over the communications channel from the content server is received by the middleware filter according to the data synchronization and the middleware filter is programmed to selectively filter the content in response to meta data within the content resulting in filtered content and send only the filtered content to the first network device, wherein the meta data comprises a data type of the content.

85. A network of devices to filter synchronized data, the network of devices comprising:

a. a content server to store content;

b. a first network device; and

c. a second network device coupled between the first network device and the content server, the second network device comprising a middleware filter, such that during a data synchronization, content is received by the middleware filter from the content server according to the data synchronization and the middleware filter is programmed to selectively filter the content in response to meta data within the content resulting in filtered content and send only the filtered content to the first network device, wherein the meta data comprises a data type of the content, and further wherein the first network device and the second network device are local and the content server is remote from the first network device and the second network device.

IX. EVIDENCE APPENDIX

STATEMENT

Pursuant to 37 C.F.R. § 41.37(c)(1)(ix), the following is a statement setting forth where in the record the evidence of this appendix was entered by the examiner:

Evidence Description:	**Where Entered:**
U.S. Pat. No. 6,341,316 B1	Office Action mailed January 26, 2007
Office Action mailed March 4, 2009	Examiner Office Action
Office Action mailed September 1, 2009	Examiner Office Action

X. RELATED PROCEEDINGS APPENDIX

There are no related proceedings.